

**IN THE CLAIMS:**

*Kindly replace the claims of record with the following full set of claims:*

1-5 (Canceled)

6. (Currently amended) A transmission apparatus for use in an optical subscriber network, having a plurality of optical network units (ONU), the ONU ~~further~~ comprising:

an synchronous transport module (STM) unit for receiving transmitting an optical signal and converting a received optical signal into an electrical signal and outputting an HDLC packet;

a high-level data link control (HDLC) packet processing unit disposed inside the ONU, for receiving ~~optical~~ signals from the STM unit, the HDLC packet processing unit further including:

an multi-program transmission stream (MPTS) data receiver for receiving the optical signal from the STM unit, ~~for converting the received optical signal into an electrical signal and outputting an HDLC packet~~;

an MPTS data extractor coupled to the MPTS receiver, for receiving the HDLC packet from the MPTS data receiver, removing overhead from the HDLC packet and extracting MPTS data;

a buffer coupled to the MPTS data extractor, for buffering the extracted MPTS data;

a controller for controlling the MPTS receiver, the MPTS data extractor and the buffer; and

a switching unit for switching the MPTS data from the HDLC packet processing unit to a plurality of subscribers, said switching unit comprising:

a first memory for storing the MPTS data; and

a plurality of secondary memory units having assigned storage areas,  
defined by an address, dependent upon the MPTS data associated with a  
corresponding subscriber in the first memory and

means for outputting the stored MPTS data to a corresponding one of the  
plurality of subscribers by said subscriber accessing said address in said  
secondary memory.

7. (Previously presented) The transmission apparatus as claimed in claim 6,  
wherein the buffer continuously outputs the MPTS data.

8. (Cancelled).

9. (Currently amended) The transmission apparatus as claimed in claim [[8]] 6,  
wherein the plurality of subscribers access the MPTS data based upon predetermined  
requirements of each subscriber.

10. (Cancelled).

11. (Currently amended) The transmission apparatus as claimed in claim 6,  
wherein the HDLC protocol provides for a HDLC packet of a size of 64 Bytes byte to

1024 Bytes byte of a ATM payload.

12. (Cancelled)

13. (Previously presented) The transmission apparatus as claimed in claim 6,  
wherein the transmission apparatus provides for a payload transmission rate of 6:512.

14. (Currently amended) The transmission apparatus as claimed in claim  
[[8]] 6, wherein the plurality of secondary memory units is configured for  
outputting or discarding first-inputted MPTS data according to a first-in first-out  
(FIFO) method.